

# PVM-Batt+

## PV Battery Import Export Meter

# Installation Manual

V1.0 June 2016

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### **PRODUCT ADVISORY NOTICE**

**This product must be installed by a competent person in accordance with the IEE Wiring Regulations, BS7671 (17<sup>th</sup> Edition or later) and current Building Regulations.**

**Ensure the electrical supply is disconnected before installation or removing the cover of the Batt+ unit.**

## Product Description

The **matt:e** Batt+ PV Battery Import Export Meter is designed for use in domestic and light commercial / retail applications where a PV with battery storage system is installed.

The unit is not intended for any purpose other than that defined within this document.

## **WARNINGS**

Please read and observe the following notices carefully. These warnings must be observed when installing and operating the Batt+ unit.

**All relevant supplies must be isolated or disconnected before commencing any work.**

**This product must be installed by a competent person in accordance with the IEE Wiring Regulations, BS7671 (17<sup>th</sup> Edition or later) and any relevant Building Regulations.**



**Once installed, the unit has a Live Mains Supply (230v or higher) within the enclosure. The cover must not be removed until the supply to the unit has been isolated or disconnected.**

## Safety Advice

The unit must be installed in a dry ventilated location; it must never be covered or have restricted ventilation.

The Batt+ unit is rated for a maximum 20A.

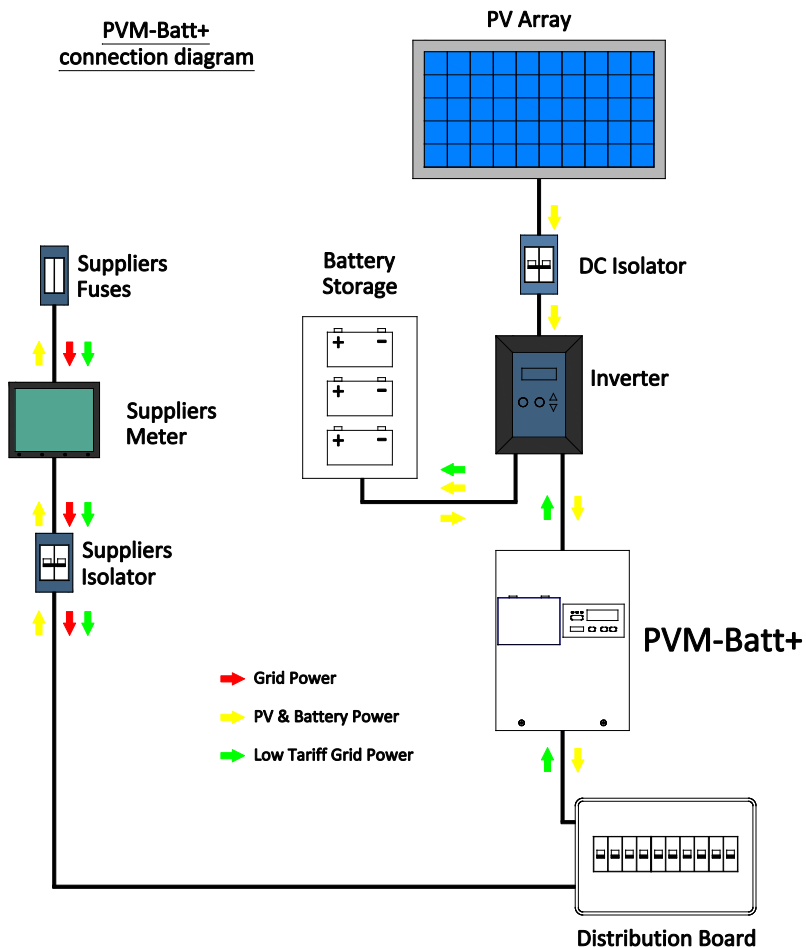
For any information not contained within this document, please contact our technical support team on 01827 61231.

## Introduction

The **matt:e** Batt+ unit is a MID approved single phase import export metering solution designed to facilitate the charging of hybrid PV battery systems from the grid during low tariff periods.

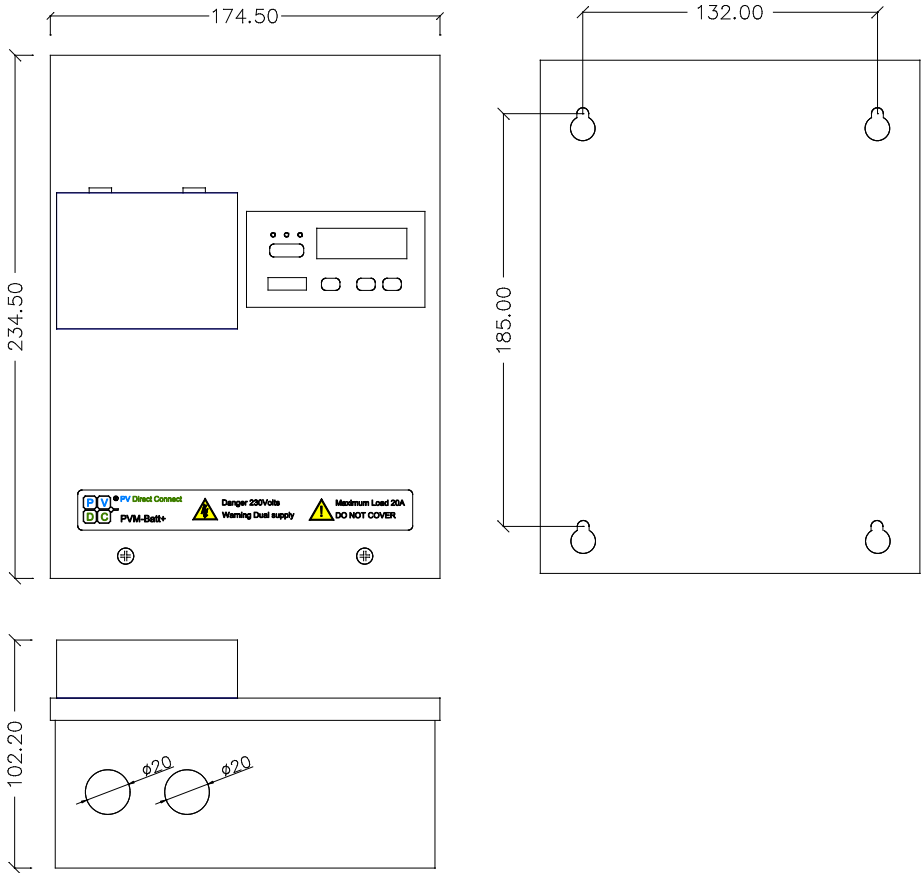
Rated at 20A, the unit is suitable for most single phase PV inverter systems up to 4kW. It is essential to check the rating of the PV/battery system is compatible with the Batt+ unit before installing.

**PVM-Batt+  
connection diagram**



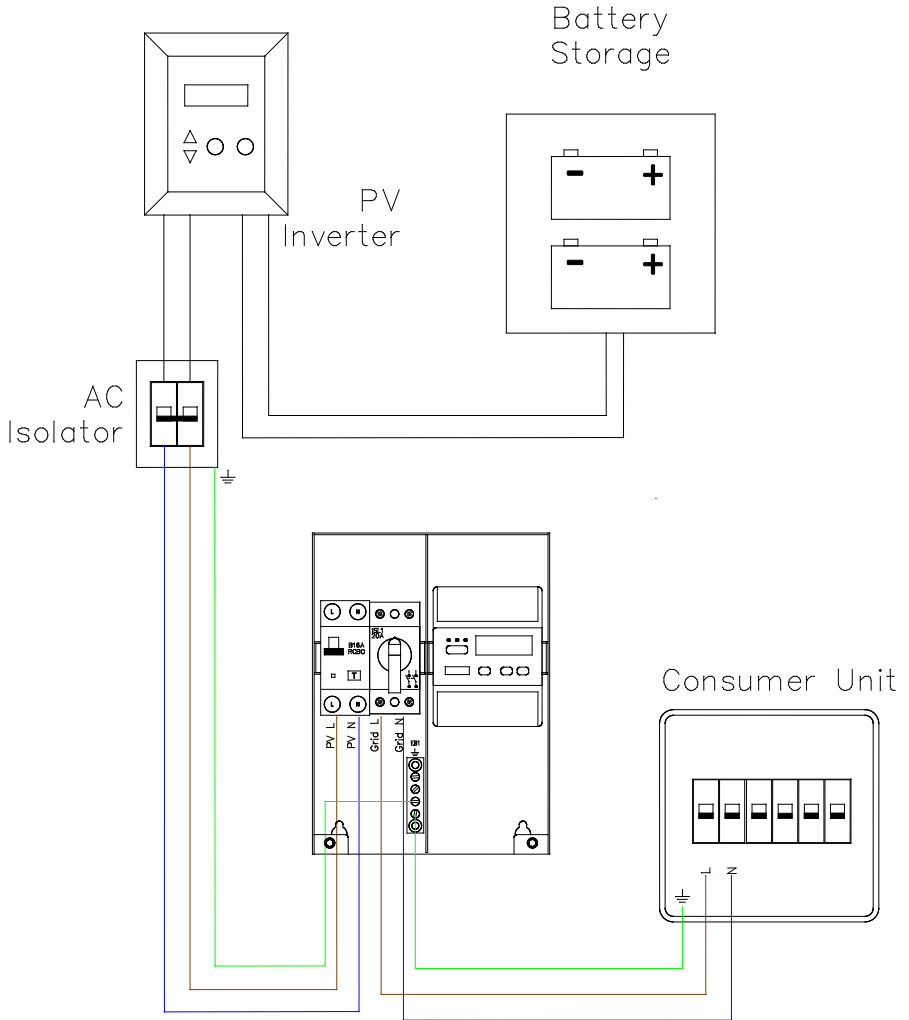
The unit is designed to be installed between the PV Inverter and the consumer unit. The installation location should be clean, dry and well ventilated.

Please refer to the diagrams below for the dimensions and mounting arrangements of the unit.



## Electrical Connections

The user wiring connections are indicated in the diagram below.



Connect the incoming (live) cable from the consumer unit MCB or RCBO to the isolator, Grid-L & Grid-N terminals. Connect the outgoing cable to the 20A MCB PV-L & PV-N terminals.

On completion of installation the tightness of all electrical connections should be checked before energising the unit.

### Operating Instructions

During normal operation the meter will display the summation display as in picture 3 on page 8. **This is the reading to submit for the feed in tariff.**

To display the energy imported from the grid press the up arrow once.

Press the up arrow once more to show the amount of energy generated from the PV system

Press again to show summation

After a few seconds of inactivity the meter will return to the summation screen.

Import Display -1

Shows power imported from the grid



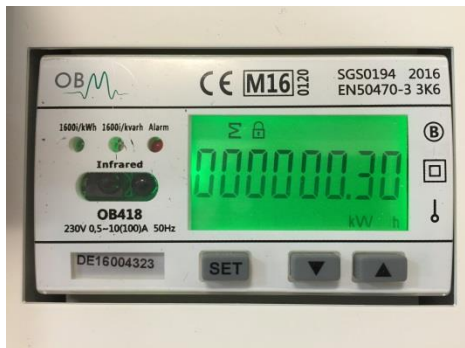
Export Display - 2

Shows power supplied by the PV/Battery



Summation Display -  $\Sigma$

Shows balance of power supplied less power imported





Specifications

<b>Description</b>	<b>PVM-Batt+</b> PV Battery Import Export Meter
<b>Input (Volts)</b>	Nominal input voltage 240v, 50Hz, Single Phase AC
<b>Max Load</b>	20A
<b>Dimensions</b>	234.5mm x 174.5mm x 82 (110)mm
<b>Weight</b>	Approximately 2.0 kg
<b>Operating Temperature</b>	-5°C to +40°C
<b>Terminal Capacity</b>	PV Live = 10mm <sup>2</sup> PV Neutral = 10.0mm <sup>2</sup> Grid Live = 6.0mm <sup>2</sup> Grid Neutral = 6.0mm <sup>2</sup>
<b>Enclosure</b>	Mild Steel Powder Coated
<b>Ingress Protection</b>	IP20
<b>Cable Entry Facility</b>	Bottom – 2 x 20mm Diameter
<b>Document Revision</b>	V1.0 June 2016

Warranty

The PV+ Grid Monitor Unit is guaranteed for a period of 12 months from the date of manufacture.

This warranty is limited to the replacement of faulty components only.

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